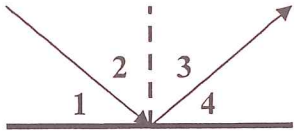
Name: _____

REFLECTION STUDY SHEET #2

1. When the sun has just set and the moon appears as a narrow crescent, the "dark" part of the moon can be seen. How is this possible and what is it called?

2. In the diagram at the right, which is the angle of incidence and which is the angle of reflection?



3. If you can see the eyes of someone in a complicated system of mirrors, is it possible for him/her to see your eyes?

4. What is the focal length of a plane mirror?

5. Is a real image formed by a curved mirror ever larger than the actual object?

6. Is a virtual image formed by a curved mirror ever smaller than the actual object?

7. Where must an illuminated object be placed with reference to a **concave** mirror with a focal length of 1 meter in order for its image to be focused on a screen 6 meters from the mirror? What type of image is formed?

8. An object is placed 25 cm from a **concave** mirror with a focal length of 10 cm. Draw a sketch and calculate where the image is located and its size.

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9. An object is located 10 cm in front of a **concave** mirror whose focal length is 15 cm. Draw a sketch and calculate where the image is located and its size.

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10. An object is located 30 cm in front of a **concave** mirror whose focal length is 20 cm. Draw a sketch and calculate where the image is located and its size.

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11. An object is located 6 cm in front of a **concave** mirror whose focal length is 12 cm. Draw a sketch and calculate where the image is located and its size

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12. An object is 24 cm from a **convex** mirror whose focal length is 8 cm. Draw a sketch and calculate where the image is located and its size.

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13. An object is 50 cm from a **convex** mirror whose focal length is 25 cm. Draw a sketch and calculate where the image is located and its size.
